

ABSTRACT OF THE DISCLOSURE

An optical apparatus for measuring the velocity of flowing biomaterials is disclosed, which has a coherent light source for projecting a light beam with low coherent length; a reference member having mirrors for periodically reflecting lights thereon; a photo detector for receiving photo signals; a splitter for splitting said light beam from said coherent light source into a reference beam and a detecting beam. The disclosed optical apparatus can save the time for complicate computation and the cost of software or hardware for measuring the flowing velocity of biomaterials, especially the flowing velocity of flowing bloods in vessels.